



Issuing Date 5/18/2011

Revision Date 8/6/2012

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name DPD #1 TABLET

Product Code(s) 6903

Recommended Use Test kit reagent for water testing. Industrial (not for food or food contact use).

Company LaMotte Company, Inc.
802 Washington Avenue
P.O. Box 329
Chestertown, MD 21620
USA

Emergency Telephone Number 24 Hour Emergency Number (CHEM-TEL):
USA, Canada, Puerto Rico 1-800-255-3924
Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICATION**Emergency Overview**

Harmful if swallowed
May cause skin, eye, and respiratory tract irritation
May produce an allergic reaction

Appearance White**Physical State** Solid, Tablet**Odor** Odorless

OSHA Regulatory Status While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

Potential Health Effects

Principle Routes of Exposure Skin contact, Ingestion.

Acute Toxicity**Eyes**

May cause irritation.

Skin

May cause irritation.

Inhalation

May cause irritation of respiratory tract.

Ingestion

May be harmful if swallowed.

Chronic Effects

May produce an allergic reaction.

Main Symptoms

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Aggravated Medical Conditions

None known.

Interactions with Other Chemicals

None known.

Environmental Hazard

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1
Polyamino carboxylic acid	-	0 - 10%
Aromatic carboxylic acid salt	-	1-5
Phosphate salt	-	5-10
Boric acid	10043-35-3	8
Carboxylic acid	-	15-25
Carbonate salt	-	20-30
Potassium salt	-	25-30

Ingredients not specifically listed by name are proprietary to the LaMotte Company, registered under the State of New Jersey Trade Secret protection law, assigned the NJTSRN#80100291-5002p, and may be disclosed only in a medical emergency.

4. FIRST AID MEASURES

General Advice	Do not get in eyes, on skin, or on clothing.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If irritation persists or develops, contact a physician.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. If irritation develops or persists, consult physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and contact emergency personnel. Call a physician immediately.
Ingestion	Do not induce vomiting without medical advice. Drink plenty of water. Clean mouth with water. Never give anything by mouth to an unconscious person. Consult a physician.
Protection of First-aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not a fire hazard.			
Flash Point	Not applicable			
Suitable Extinguishing Media	Water spray, dry chemical, carbon dioxide (CO ₂), or foam.			
Explosion Data				
NFPA	Health Hazard 1	Flammability 0	Stability 0	Physical and Chemical Hazards N/A
HMIS	Health Hazard 1	Flammability 0	Stability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Refer to Section 8.
Methods for Containment	Sweep up in a manner that does not disperse dust and shovel into suitable containers for disposal. Dispose according to federal, state, and local regulations.
Methods for Cleaning Up	If local regulations permit, dissolve and rinse to drain with excess water. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice. Prevent contact with skin, eyes, and clothing. Do not ingest. Do not eat, drink, or smoke when using this product.

Storage Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep out of the reach of children. Keep away from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2	None Known	None Known	None Known
Polyamino carboxylic acid	None Known	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known
Boric acid 10043-35-3	= 6 mg/m ³ STEL TWA: 2 mg/m ³	None Known	None Known
Carboxylic acid	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/Face Protection

Safety glasses with side-shields. Avoid contact with eyes.

Skin and Body Protection

Wear latex or nitrile gloves.

Respiratory Protection

None required under normal usage.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White	Odor	Odorless
Physical State	Solid, Tablet	pH	6 (1 tablet in 10mL of water)
Flash Point	Not applicable	Autoignition Temperature	Not applicable
Boiling Point/Range	No information available	Freezing Point	No information available
Explosion Limits	Not applicable		
Molecular Weight	No data available	Water Solubility	Soluble in water

10. STABILITY AND REACTIVITY

Stability Stable.

Incompatible Products None known based on information supplied.

Conditions to Avoid Exposure to air or moisture over prolonged periods. Direct sunlight.

Hazardous Decomposition Products None under normal use.

Hazardous Polymerization

Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity****Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

LD50 Oral VALUE (mg/kg)

Oral Rat LD50: 195mg/kg for N,N-Diethyl-p-phenylenediamine sulfate

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known
Polyamino carboxylic acid	2 g/kg (Rat)	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known
Phosphate salt	None Known	4640 mg/kg (Rabbit)	None Known
Boric acid	2660 mg/kg (Rat)	2000 mg/kg (Rabbit)	None Known
Carboxylic acid	3000 mg/kg (Rat)	None Known	None Known
Carbonate salt	1440 mg/kg (Rat)	1.87 mg/kg (Rat)	None Known
Potassium salt	2600 mg/kg (Rat)	None Known	None Known

Chronic Toxicity**Chronic Toxicity**

May produce an allergic reaction.

Chemical Name	ACGIH	IARC	NTP	OSHA
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known	None Known
Polyamino carboxylic acid	None Known	None Known	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known	None Known
Boric acid	None Known	None Known	None Known	None Known
Carboxylic acid	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known

Chemical Name	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known
Polyamino carboxylic acid	None Known	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known
Boric acid	None Known	None Known	None Known
Carboxylic acid	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known

12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known	None Known
Polyamino carboxylic acid	None Known	LC50= 159 mg/L <i>Lepomis macrochirus</i> 96 h LC50= 320 mg/L <i>Poecilia reticulata</i> 96 h	EC50 = 56 mg/L 8 h	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known	None Known
Boric acid	None Known	None Known	None Known	EC50 658 - 875 mg/L 48 h EC50 = 115.0 mg/L 48 h
Carboxylic acid	None Known	LC50= 1516 mg/L <i>Lepomis macrochirus</i> 96 h LC50= 440 mg/L <i>Leuciscus idus</i> 96 h	EC50 = 14 mg/L 15 min	EC50 = 120 mg/L 72 h
Carbonate salt	None Known	None Known	None Known	None Known
Potassium salt	EC50 = 2500 mg/L 72 h	LC50= 2010 mg/L <i>Lepomis macrochirus</i> 96 h	None Known	EC50 = 825 mg/L 48 h
Chemical Name	Log Pow			
N,N-Diethyl-p-phenylenediamine sulfate	None Known			
Polyamino carboxylic acid	None Known			
Aromatic carboxylic acid salt	None Known			
Phosphate salt	None Known			
Boric acid	= -0.757 25 °C			
Carboxylic acid	-1.72 20 °C			
Carbonate salt	None Known			
Potassium salt	None Known			

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of in accordance with local regulations.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
N,N-Diethyl-p-phenylenediamine sulfate - 6283-63-2	None Known	None Known	None Known	None Known
Polyamino carboxylic acid -	None Known	None Known	None Known	None Known
Aromatic carboxylic acid salt -	None Known	None Known	None Known	None Known
Phosphate salt -	None Known	None Known	None Known	None Known
Boric acid - 10043-35-3	None Known	None Known	None Known	None Known
Carboxylic acid -	None Known	None Known	None Known	None Known
Carbonate salt -	None Known	None Known	None Known	None Known
Potassium salt -	None Known	None Known	None Known	None Known

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

Not regulated

IMDG/IMO

Not regulated

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 (1)	TSCA	DSL	X	3-243	X	KECL	X	X
Polyamino carboxylic acid (0 - 10%)	Present	X	X	2-1265	X	KE-13651	X	X
Aromatic carboxylic acid salt (1-5)	Present	X	X	3-1272; 3-1293	X	KE-02710	X	X
Phosphate salt (5-10)	Present	X	X	1-452	X	KE-28622	X	X
Boric acid 10043-35-3 (8)	Present	X	X	1-63	X	KE-03499	X	X
Carboxylic acid (15-25)	Present	X	X	2-1318	X	KE-20831	X	X
Carbonate salt (20-30)	Present	X	X	1-153	X	KE-29083	X	X
Potassium salt (25-30)	Present	X	X	1-228	X	KE-29086	X	X

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1	None Known
Polyamino carboxylic acid		0 - 10%	None Known
Aromatic carboxylic acid salt		1-5	None Known
Phosphate salt		5-10	None Known
Boric acid	10043-35-3	8	None Known
Carboxylic acid		15-25	None Known
Carbonate salt		20-30	None Known
Potassium salt		25-30	None Known

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 (1)	None Known	None Known	None Known	None Known
Polyamino carboxylic acid (0 - 10%)	None Known	None Known	None Known	None Known
Aromatic carboxylic acid salt (1-5)	None Known	None Known	None Known	None Known

Phosphate salt (5-10)	None Known	None Known	None Known	None Known
Boric acid 10043-35-3 (8)	None Known	None Known	None Known	None Known
Carboxylic acid (15-25)	None Known	None Known	None Known	None Known
Carbonate salt (20-30)	None Known	None Known	None Known	None Known
Potassium salt (25-30)	None Known	None Known	None Known	None Known

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	1	None Known	None Known	None Known	None Known
Polyamino carboxylic acid		0 - 10%	None Known	None Known	None Known	None Known
Aromatic carboxylic acid salt		1-5	None Known	None Known	None Known	None Known
Phosphate salt		5-10	None Known	None Known	None Known	None Known
Boric acid	10043-35-3	8	None Known	None Known	None Known	None Known
Carboxylic acid		15-25	None Known	None Known	None Known	None Known
Carbonate salt		20-30	None Known	None Known	None Known	None Known
Potassium salt		25-30	None Known	None Known	None Known	None Known

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known
Polyamino carboxylic acid	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known
Phosphate salt	None Known	None Known
Boric acid	None Known	None Known
Carboxylic acid	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	None Known	None Known

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

Chemical Name	CAS-No	California Prop. 65
N,N-Diethyl-p-phenylenediamine sulfate	6283-63-2	None Known
Polyamino carboxylic acid		None Known
Aromatic carboxylic acid salt		None Known
Phosphate salt		None Known
Boric acid	10043-35-3	None Known
Carboxylic acid		None Known
Carbonate salt		None Known
Potassium salt		None Known

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known	None Known	None Known	None Known
Polyamino carboxylic acid	None Known	None Known	None Known	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known	None Known	None Known	None Known
Phosphate salt	None Known	None Known	None Known	None Known	None Known

Boric acid	None Known	X	None Known	None Known	None Known
Carboxylic acid	None Known	None Known	None Known	None Known	None Known
Carbonate salt	None Known	None Known	None Known	None Known	None Known
Potassium salt	None Known	None Known	None Known	None Known	None Known

International Regulations**Mexico - Grade**

Chemical Name	Carcinogen Status	Exposure Limits
N,N-Diethyl-p-phenylenediamine sulfate	None Known	None Known
Polyamino carboxylic acid	None Known	None Known
Aromatic carboxylic acid salt	None Known	None Known
Phosphate salt	None Known	None Known
Boric acid	None Known	None Known
Carboxylic acid	None Known	None Known
Carbonate salt	None Known	None Known
Potassium salt	None Known	None Known

Canada

Component	WHMIS Hazard Class
N,N-Diethyl-p-phenylenediamine sulfate 6283-63-2 (1)	Not determined
Polyamino carboxylic acid (0 - 10%)	Uncontrolled product according to WHMIS classification criteria
Aromatic carboxylic acid salt (1-5)	Not determined
Phosphate salt (5-10)	Uncontrolled product according to WHMIS classification criteria
Boric acid 10043-35-3 (8)	1 % D2A
Carboxylic acid (15-25)	1 % E
Carbonate salt (20-30)	1 % D2B E
Potassium salt (25-30)	Uncontrolled product according to WHMIS classification criteria

**16. OTHER INFORMATION**

NFPA	HMIS	PPE	Transport Symbol
	(Bad file name)		

Prepared By
Issuing Date
Revision Date
Revision Note

Regulatory Affairs Department
5/18/2011
07-Aug-2012
Initial Release. (M)SDS sections updated. 3.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS